CTE CREDENTIALING CERTIFIES SUCCESS

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BY SUSAN REESE

According to *Webster's Dictionary*, a credential is something that gives a title to credit or confidence. The certificates and diplomas earned in career and technical education (CTE) are providing students with both the credits to help them find success in the workplace or in further education, as well as the confidence of knowing they have the skills that are needed. There are a number of ways that CTE students are earning these credentials. For example, NOCTI provides more than 170 standardized assessments in occupations that range from culinary to building trades to business to manufacturing. (For more information about NOCTI, see the article on page 30 in this issue of *Techniques*.)

Credentials Designed for Success

As Autodesk notes, career and technical education programs across the United States equip students with marketable 2-D and 3-D design skills by teaching them to use state-of-the-art design software such as that offered by Autodesk. AutoCAD Certified User and Autodesk Inventor Certified User credentials include both academic and industry requirements in attainable certifications designed specifically for students. According to Autodesk, the exams combine multiple-choice and performance-based questions to ensure students understand and can effectively use the company's software. Through the Autodesk Education Community, students and educators also have the opportunity to get free software, learning materials and classroom support.

Autodesk notes that not only do these credentials confirm that students have the necessary skills to continue their design careers, but it also gives students the confidence they need to enter the workforce or to go on to pursue postsecondary education or additional certifications.

Mastercam is another company with a certification program designed to give students an extra edge with employers and, as the company notes, increases your school's value to the local community. When a school is recognized as providing valuable skills along with the credentials to back up those skills, more students will be attracted to the program.

As the company's Web site points out, while certification was originally meant to create a benchmark for schools, many programmers see certification as a way to validate the skills they know. Mastercam describes its certification program as a rigorous set of practical tests that recognize a programmer's knowledge and ability to work effectively with Mastercam CAM software, overcome common issues facing today's shops, and produce high-quality finished parts. According to the company, its certification program has additional flexibility for students and schools since it can be used as an online training course and can be worked into a dual-credit program. Mastercam instructor certification classes are now available online as well.

Constructing Credentials for Success

The National Center for Construction Education and Research (NCCER) maintains a credentialing and certification system through its National Registry, which tracks both training and/or assessments for its participants. For training, the National Registry provides transcripts, certificates and wallet cards to students who complete the company's curriculum through an NCCER Accredited Training Sponsor, making it easy to provide verification of their training to current or potential employers. For assessments, certification of an individual's qualifications is tracked through the National Registry, and credentials include certification of successful completion of the written assessment for a craft; performance verification for a craft; and certified-plus for successful completion of both the written assessment and the corresponding performance verification.

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Among the NCCER certifications is the Mobile Crane Operator Certification Program, in which students can earn 13 equipment-specific certifications. There is also a Rigger and Signal Person Certification Program that includes three levels of rigger certifications (basic, intermediate and advanced), as well as a signal person certification. As NCCER notes, these industry credentials give employers confidence in a craft professional's skill, knowledge and desire for continuous improvement, and they provide those who earn them with portable, industry-recognized credentials.

When the Home Builders Institute (HBI) established its Residential Construction Academy (RCA) initiative in 2001, it was intended to bridge the critical

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skill gap that exists within the residential construction industry. RCA develops educational materials and programs that meet the current and future needs of the National Association of Home Builders' members. It includes performance-based testing designed to measure tasks such as carpentry, wiring, plumbing and HVAC. There is program credentialing for educational institutions, and there are training programs that utilize the materials.

HBI also developed four-hour modules for Residential Superintendent Designation courses, and a Residential Construction Superintendent (RCS) designation is issued to candidates who successfully complete the full set of eight courses. According to HBI, it is in the process of developing a second track of RCS programming—the Advanced Residential Construction Superintendent (ARCS) designation—that is designed for individuals who have already received the RCS designation.

HBI recently updated its Pre-Apprenticeship Certificate Training (PACT) curriculum to reflect the trend toward green building and the new "green" skills needed for the residential construction workforce. The PACT curriculum is used by HBI's Workforce, Training and Employment Department in its training programs.

Getting Ready With SkillsUSA

Working with technical committees on the identification of standards and competencies and the development of questions to appropriately measure technical skills

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and knowledge, SkillsUSA has developed a Work Force Ready System that provides assessments for CTE that are supported by industry, education and policy leaders. These committees, notes SkillsUSA, represent diverse, leading organizations that serve their respective industries.

According to SkillsUSA, "Skill Connect Assessments help candidates prove their technical skills and knowledge to potential employers. They also help local instructors and programs demonstrate the value of their programs, while supporting local industries with a pool of potential employees that have been tested by a system they can trust."

They may be used as pre-assessments to identify individual educational needs; to identify proficiency levels at the completion of a program of study at either the secondary or postsecondary level; or by organizations conducting workforce development and training efforts.

SkillsUSA likens these assessments to the PSAT test and describes them as "an on-ramp" for programs such as those of CompTIA and the American Welding Society, and the certificates as identifying the competencies tested and not intended to serve as an equivalent to industry certifications currently available.

Automotive Youth Educational Systems (AYES) and the National Automotive Technicians Education Foundation (NATEF) have partnered with SkillsUSA to offer a single National Automotive Student Skills Standards Assessment program. The tests, which were developed by Automotive Service Excellence (ASE), are designed to evaluate students who are near the end of their studies in automobile service, collision repair and refinishing, and medium/heavy truck.

Another partnership established by SkillsUSA is with the Graphic Arts Education and Research Foundation (GAERF) to offer online PrintED/SkillsUSA assessments; PrintED is a national accreditation program administered by GAERF that is based on industry standards for graphic communications courses of study at the secondary and postsecondary levels. The assessments assess technical skills and knowledge with interactive questions enriched by animations, videos, drawings and photographs. Students who receive passing scores on the assessments will receive co-branded GAERF/SkillsUSA certificates.

The Role of Community and Technical Colleges

Community and technical colleges are experiencing a surge in enrollments because of the great value they offer for young people who are looking for affordable

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postsecondary education, and to acquire the skills they will need to enter the workforce. But older, more experienced adults are also turning to community and technical colleges because they either need to change careers or update their current skills.

At the four city campuses of Bishop State Community College (BSCC) in Mobile, Alabama, students in the technical program of study have a number of options for earning credentials. For example, the college's Division of Commercial and Industrial Technology offers Associate of Occupational Technologies Certificates in automotive body technology, barbering/hair styling, and commercial food service. It also offers an Associate in Applied Science Certificate in commercial food service, as well as certificates in masonry, plumbing, tailoring/alterations and welding.

Among the certificates offered by the BSCC Division of Consumer and Transportation Technology are ones in cosmetology, diesel technology, graphic communications, jewelry design, nail technology, and truck driving. Students in the Division of Engineering and Construction Technology may earn degrees and certificates that include carpentry, civil engineering, electrical technology, electronics engineering technology, machine tool technology, and process and maintenance technology.

Cuyahoga Community College (Tri-C) is Ohio's oldest and largest community college, and as such has many degree and certificate options available. There are Associate of Applied Business degrees in administrative office systems and captioning and court reporting, and Associate of Applied Science degrees in different aspects of applied industrial technology. There are also certificate programs ranging from automotive maintenance to massage therapy to magnetic resonance imaging to visual communication and design.

At Tri-C, the students range in age from teenagers to seniors, and the college offers fast-track career programs and certifications that can be completed quickly with classes held days, evenings and weekends. For example, at the Cuyahoga Center for Health Industry Solutions, there are fast-track certification programs for nurse assistant and patient access specialist. During the 2010-2011 academic year, the school awarded 2,544 degrees and certificates, and according to Tri-C, of the 86 percent of graduates from its career programs who find employment, 83 percent are in jobs that relate to their field of study.

In 2012 the Wisconsin Technical College System (WTCS) will celebrate its centennial. Although it was established in 1912 as one technical college, today's Wisconsin technical colleges cover the state

and offer more than 300 programs ranging from welding to business to health care to biotechnology. WTCS also has Advanced Technical Certificates in which some of the credits are advanced content beyond the associate degree level.

At Wisconsin's Gateway Technical College, there are numerous certificate options available in fields that range from CAD/CAM to hospitality to health care to business technology to transportation. Gateway also offers Advanced Technical Certificates in computer animation, digital photography, financial planning, game programming, geothermal specialist, multimedia, network security, telecommunications engineering, and urban farming, as well as an Oracle Advanced Technical Certificate.

Fox Valley Technical College is one of the Wisconsin schools that partner with the Cisco Networking Academy to provide students the opportunity to prepare for the Cisco Certified Networking Associate (CCNA) exam. The Milwaukee Area Technical College offers the Cisco Internetworking Certificate, which includes four courses that prepare students for the CCNA exam.

In the CompTIA Certified IT Professional Certificate Program at Waukesha County Technical College, students will gain the skills required to pass CompTIA certifications for A+, Server+, Network+, and Security+. The college notes that as a VUE/Pearson testing center and a CompTIA member, it is able to provide testing at a discounted rate.

Graduates of Wisconsin's technical colleges have gone on to careers in engineering and sustainability, and according to WTCS, as the workplace changes, its programs change to offer the greatest potential for career growth. As a result, even in a down economy, 86 percent of its graduates have jobs within six months of graduation.

In today's economy, it's important to note that career and technical education, beginning in secondary programs and continuing through community and technical colleges, is giving students the skills they need for the global workplace or for continuing their educations. It is also providing them with the credentials that prove their value to employers and to the future of our nation. T

Explore More

For more information about the credentialing organizations discussed in this article, here are some Web sites to visit.

American Welding Society
www.aws.org

Autodesk
www.autodesk.com

Automotive Service Excellence
www.ase.com

Automotive Youth Educational Systems
www.ayes.org

Cisco Systems, Inc.
www.cisco.com

CompTIA
www.comptia.org

Graphic Arts Education and Research Foundation
www.gaerf.org

Home Builders Institute
www.hbi.org

Mastercam
www.mastercam.com

National Center for Construction Education and Research
www.nccer.org

NOCTI
www.nocti.org

Oracle
www.oracle.com

SkillsUSA
www.skillsusa.org

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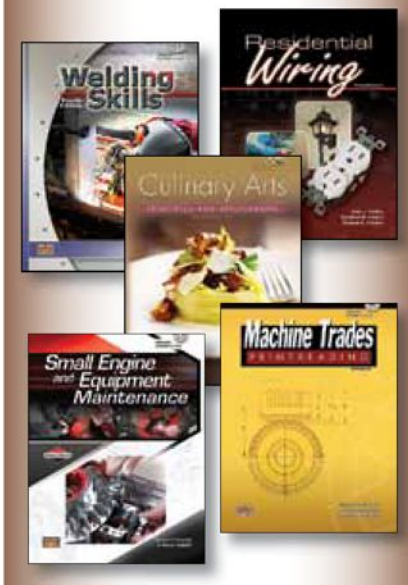

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